July 2, 2014

R307. Environmental Quality, Air Quality.
R307-347. Large Appliance Surface Coatings.
R307-347-1. Purpose.

The purpose of this rule is to reduce volatile organic compound (VOC) emissions from large appliance surface coating operations.

R307-347-2. Applicability.

[~~(1)~~]R307-347 applies to sources located in Box Elder, Cache, Davis, Salt Lake, Tooele, Utah and Weber counties that have the potential to emit 2.7 tons per year or more of VOC, including related cleaning activities.

[~~(2) In Box Elder and Tooele counties, R307-347 applies to the following sources:~~

~~(a) Existing sources as of February 1, 2013, that have the potential to emit 5 tons per year or more of VOC, including related cleaning activities; and~~

~~(b) New sources as of February 1, 2013, that have the potential to emit 2.7 tons per year or more of VOC, including related cleaning activities.~~]

R307-347-3. Exemptions.

(1) The requirements of R307-347 do not apply to the following:
(a) Stencil coatings;
(b) Safety-indicating coatings;
(c) Solid-film lubricants;
(d) Electric-insulating and thermal-conducting coatings;
(e) Touch-up and repair coatings; or
(f) Coating application utilizing hand-held aerosol cans.

R307-347-4. Definitions.

The following additional definitions apply to R307-347:

"Air dried coating" means coatings that are dried by the use of air or a forced warm air at temperatures up to 194 degrees Fahrenheit.

"Baked coating" means a coating that is cured at a temperature at or above 198 degrees Fahrenheit.

"Coating" means a protective, functional, or decorative film applied in a thin layer to a surface. This term often applies to paints such as lacquers or enamels. It is also used to refer to films applied to paper, plastics, or foil.

"Extreme performance coatings" means coatings designed for harsh exposure or extreme environmental conditions.

"Large appliances" means doors, cases, lids, panels, and interior support parts of residential and commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dishwashers, trash compactors, air conditioners, and other similar products.

R307-347-5. [~~Emission Standards~~]VOC Content Limits.

Each owner or operator shall not apply coatings with a VOC content in excess of the amounts specified in Table 1 or shall use an add-on control device as specified in R307-347-7.

TABLE 1

Large Appliance Coating Limitations
(values in pounds VOC per gallon of coating, minus water and exempt solvents(compounds not classified as VOC), as applied)

COATING CATEGORY	VOC [~~EMISSION RATES~~]CONTENT LIMITS	
	Baked	Air Dried
General, one component	2.3	2.3
General, multi-component	2.3	2.8
Extreme high gloss	3.0	2.8
Extreme performance	3.0	3.5
Heat resistance	3.0	3.5
Solar absorbent	3.0	3.5
Metallic	3.5	3.5
Pretreatment coatings	3.5	3.5

R307-347-6. Work Practices and Recordkeeping.

(1) The owner or operator shall:

(a) Store all VOC-containing coatings, thinners, and cleaning materials in closed containers;

(b) Minimize spills of VOC-containing coatings, thinners, and cleaning materials;

(c) Clean up spills immediately;

(d) Convey any coatings, thinners, and cleaning materials in closed containers or pipes;

(e) Close mixing vessels that contain VOC coatings and other materials except when specifically in use; and

(f) Minimize usage of solvents during cleaning of storage, mixing, and conveying equipment.

(2) All sources subject to R307-347 shall maintain records demonstrating compliance with[~~ all provisions of~~] R307-347-5 and R307-347-6[~~ on an annual basis~~].

(a) Records shall include, but not be limited to, inventory and product data sheets of all coatings and solvents subject to R307-3[~~52~~]47.

(b) These records shall be made available to the director upon request.

(3) No person shall apply any coating unless the coating application method achieves a demonstrated 65% transfer efficiency. The following applications achieve a minimum of 65% transfer efficiency and shall be operated in accordance with the manufacturers specifications:

(a) Electrostatic application;
(b) Electrodeposition;
(c) Brush coat;
(d) Flow coat;
(e) Roll coat;
(f) Dip coat;
(g) High-volume, low-pressure (HVLP) spray; or
(h) Other application method capable of achieving at least 65% transfer efficiency, as certified by the manufacturer.

(4) All persons shall perform solvent cleaning operations with cleaning materials having VOC content of 0.21 pounds per gallon or less.

R307-347-7. [~~Optional~~]Add-On Control[~~s~~] Systems Operations.

[~~(1) The owner or operator may install and maintain an incinerator, carbon adsorption, or any other add-on emission control device, provided that the emission control device will attain at least 90% efficiency performance.~~

~~(2) The owner or operator of a control device shall provide documentation that the emission control system will attain the requirements of R307-347-7.~~

~~(3) Emission control systems shall be operated and maintained in accordance with the manufacturer recommendations. The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.~~]

(1) The owner or operator shall install and maintain an incinerator, carbon adsorption, or any other add-on emission control system, provided that the emission control system is operated and maintained in accordance with the manufacturer recommendations in order to maintain at least 90% capture and control efficiency. Determination of overall capture and control efficiency shall be determined using EPA approved methods, as follows.

(a) The capture efficiency of a VOC emission control system's VOC collection device shall be determined according to EPA's "Guidelines for Determining Capture Efficiency," January 9, 1995 and 40 CFR Part 51, Appendix M, Methods 204-204F, as applicable.

(b) The control efficiency of a VOC emission control system's VOC control device shall be determined using test methods in Appendices A-1, A-6, and A-7 to 40 CFR Part 60, for measuring flow rates, total gaseous organic concentrations, or emissions of exempt compounds, as applicable.

(c) An alternative test method may be substituted for the preceding test methods after review and approval by the EPA Administrator.

(2) The owner or operator of a control system shall provide documentation that the emission control system will attain the requirements of R307-347-7(1).

(3) The owner or operator shall maintain records of key system parameters necessary to ensure compliance with R307-347-7. Key system parameters may include, but are not limited to, temperature, pressure

and flow rates. Operator inspection schedule, monitoring, recordkeeping, and key parameters shall be in accordance with the manufacturer's recommendations, and as required to demonstrate operations are providing continuous emission reduction from the source during all periods that the operations cause emissions from the source.

(4) The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.

[~~R307-347-8. Compliance Schedule.~~

~~(1) All sources in Davis and Salt Lake counties are subject to this rule as of the effective date of this rule.~~

~~(2) Sources in Box Elder, Cache, Tooele, Utah and Weber counties shall be in compliance with this rule by January 1, 2014.~~]

KEY: air pollution, emission controls, large appliance, surface coating

Date of Enactment or Last Substantive Amendment: [~~February 1, 2013~~]2014

Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a)